

Michigan Flu Focus

Weekly Influenza Surveillance Report

April 2, 2021

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Week Ending March 27, 2021 | WEEK 12

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Data provided in this report are preliminary and will be updated as additional data is received

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

Updates of Interest

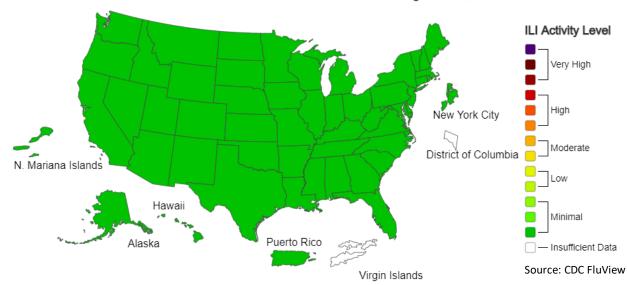
Seasonal influenza activity remains lower than usual for this time of year in Michigan and nationally.

Seasonal Flu Vaccination Coverage

Michigan's goal is to vaccinate more than **4.3 million** residents during the 2020-2021 flu season.

As of March 27, 2021, there have been **3,434,888** doses administered (**79.73%** towards goal) for the 2020-2021 flu season.

Please visit the Flu Dashboard at www.michigan.gov/flu for more info.



2020-21 Influenza Season Week 12 ending Mar 27, 2021

Note: This graph represents U.S. ILI activity levels reported to ILINet. Geographic spread of influenza has been suspended for the 2020-2021 influenza season

Influenza-associated Pediatric Mortality

Nationally, one (1) influenza-associated pediatric death has been reported thus far for the 2020-2021 flu season.

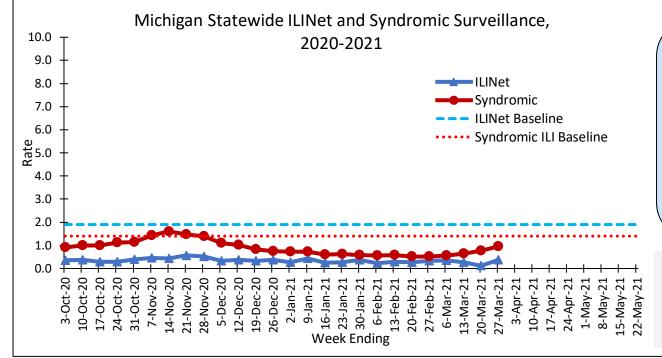
No (0) pediatric deaths have been confirmed by MDHHS for the 2020-2021 flu season.

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

Michigan participates in ILINet, a collaborative effort between the CDC, state and local health departments, and volunteer sentinel clinicians as part of Michigan's influenza surveillance. ILINet provides data on the total number of outpatient visits to health care providers seen for any reason and the number of those patients with influenza-like illness (ILI). *ILI is defined as fever* ($\geq 100^{\circ}F$) and a cough and/or a sore throat without a known cause other than influenza.

Number of Reports and ILI % by Region during this time period:

Region	С	N	SE	SW
No. of Reporters (17)	6	2	8	1
ILI %	0.3	0.5	0.4	0.0





Michigan ILI Activity: <u>0.4</u>%

(Last week: 0.1%)

Regional Baseline*: 1.9%
A total of 30 patient visits due to ILI were reported out of 8,054 office visits for Week 12.

*Regional baseline is determined by calculating the mean percentage of patient visits due to ILI during non-influenza weeks for the previous three seasons and adding two standard deviations.

National Surveillance

In the United States, <u>0.9</u>% of outpatient visits were due to ILI (Last week: 0.9%)

This is **below** the national baseline of 2.6%

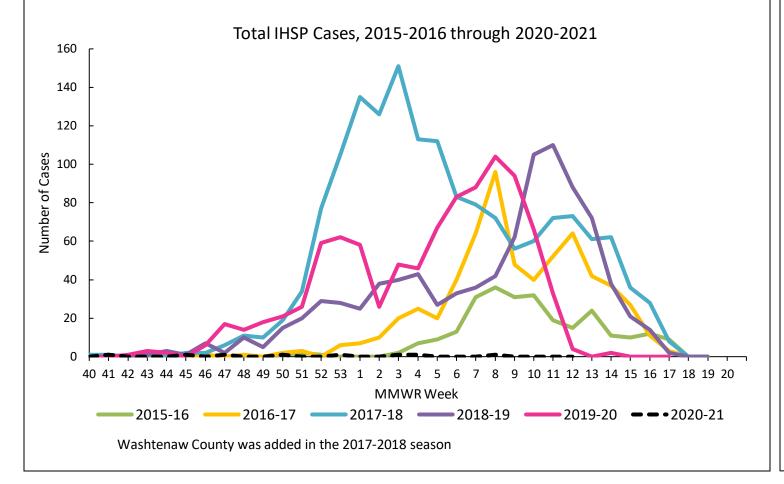
Become an ILINET provider!

Contact Shelly Doebler at DoeblerM@michigan.gov

Influenza Hospitalization Surveillance Project (IHSP)

The CDC's Influenza Hospitalization Surveillance Network (FluSurv-NET) provides populationbased rates of laboratory-confirmed influenza-associated hospitalizations from October 1st through April 30th each year. Michigan participates as an IHSP state in FluSurv-NET for Clinton, Eaton, Genesee, Ingham, and Washtenaw Counties.

There were no influenza-associated hospitalizations reported to MDHHS for the IHSP during this time period. Since October 1st, 8 (1 pediatric, 7 adult) influenza-associated hospitalizations were reported in the catchment area for the 2020-2021 season.



Join the Influenza Sentinel **Hospital Network (ISHN)!**

What is it? ISHN is a group of hospitals in Michigan that voluntarily report weekly aggregate counts of influenza positive inpatients to assist MDHHS with statewide flu surveillance.

How it works: As a participating hospital in the ISHN, you would complete a brief Survey Monkey every week containing:

- Number of hospitalizations with a positive influenza test by age group during that time period
- The total number of hospitalizations due to any condition during that time period (if available)

The data you provide can assist providers and public health in recognizing changes in the age or geographic distribution of flu in this population.

If your facility is interested in participating or would like more details, please contact Sue Kim (KimS2@michigan.gov)

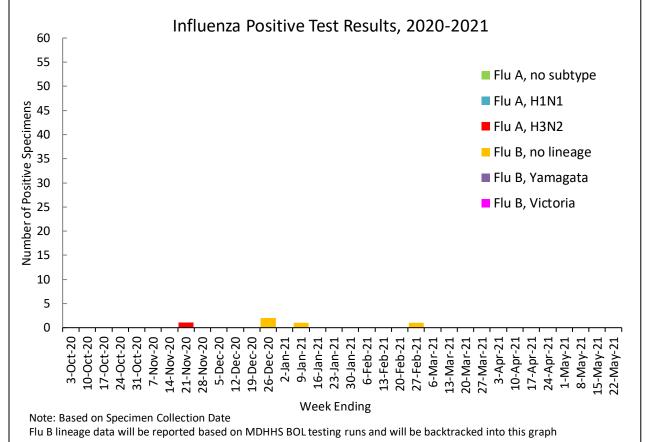
Laboratory (Virologic) Surveillance

MDHHS BOL Virology Laboratory Data

There were **0** new positive influenza results (OC, ON, OSE, OSW) reported by the MDHHS Bureau of Laboratories (BOL) during this time period.

of Positive Respiratory Virus Results by Region

	С	N	SE	SW	Total
H1N1	0	0	0	0	0
H3N2	0	0	1	0	1
Infl B	0	0	4	0	4
Total	0	0	5	0	5



Michigan Sentinel Clinical Lab Network Respiratory Virus Data

Nine (9) sentinel clinical labs (1SE, 2SW, 5C, 1N) reported

for the week ending 03/27				
SE Region				
Influenza A:	no activity			
Influenza B:	no activity			
Parainfluenza:	no activity			
RSV:	sporadic – very low			
Adenovirus:	low			
hMPV:	no activity			
Central Region				
Influenza A:	no activity			
Influenza B:	no activity			
Parainfluenza:	sporadic			
RSV:	no activity			
Adenovirus:	low			
hMPV:	no activity			
	SW Region			
Influenza A:	sporadic			
Influenza B:	no activity			
Parainfluenza:	no activity			
RSV:	no activity			
Adenovirus:	sporadic			
hMPV:	no activity			
North Region				
Influenza A:	no activity			
Influenza B:	no activity			
Parainfluenza:	no activity			

RSV:

hMPV:

Adenovirus:

no activity

no activity

no activity

There were **0** new respiratory outbreaks (OC, ON, OSE, OSW) reported to MDHHS during this time period. Respiratory outbreaks for the 2020-2021 season are listed in the table below.

of Congregate Setting Outbreaks by Region

0 - 0						
Facility Type	С	N	SE	SW	Total	
Schools: K-12 & College	0	0	0	0	0	
Long-term Care / Assisted Living Facility	0	0	0	0	0	
Healthcare Facility	0	0	0	0	0	
Daycare	0	0	0	0	0	
Homeless Shelter	0	0	0	0	0	
Correctional Facility	0	0	0	0	0	
Other	0	0	0	0	0	
Total	0	0	0	0	0	

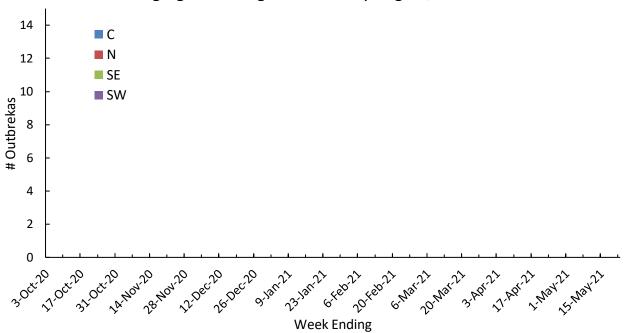
Did you know?

Congregate setting outbreaks of viral respiratory illnesses are required to be reported to your local health department? See:

- Influenza Guidance for Healthcare Providers
- Guideline for influenza and Respiratory Virus Outbreaks in Long-Term Care Facilities

Note: Outbreaks associated with COVID-19 are not reported in this table (above) or graph (below).

Congregate Setting Outbreaks by Region, 2020-2021



Influenza Vaccine Updates

Netherland's Farmer Infected with Avian-Like Swine Flu (2019)

On April 1, 2021 CDC published a <u>podcast</u> interviewing Dr. Kristien Van Reeth, a professor of virology at Ghent University in Belgium. The main topic of the interview was a discussion of a case of avian-like swine influenza in a pig farmer in the Netherlands.

Avian-like swine flu originally comes from wild birds, but the virus has crossed the species barrier to pigs. This type of infection is mainly an issue for swine on farms and large agricultural fairs that house pigs.

A human-to-human transmission in this case is a very rare event. The 2009 H1N1 pandemic virus is the single known swine origin virus with capacity to spread from pigs to humans and to human-to-human.

In September 2019, a farmer and his pigs developed standard flu-like symptoms simultaneously. A diagnostic virology lab got samples from the farmer and the sick pigs, and also from an animal caretaker of the farm who had been sick a couple of days before the farmers symptoms. The virus was able to be isolated in the pigs and farmer, but not in the caretaker. It is possible the animal caretaker's samples were taken too late for confirmation. No family or contacts developed any symptoms.

Seasonal flu vaccines will likely not protect against this type of flu, but the immune response to influenza is extremely complex. Seasonal flu vaccines are also known to enhance and broaden immune responses upon vaccination. So, there may be a small amount of cross-protection.

Dr. Kristien Van Reeth mentions that vaccinated farmers can prevent transmission of influenza viruses from humans to pigs, which is much more common. Ultimately, vaccinated humans limit the emergence of novel influenza virus lineages in swine.

Influenza News Blast

- STUDY: Development of CRISPR as an Antiviral Strategy to Combat SARS-CoV-2 and Influenza
- STUDY: Programmable Inhibition and Detection of RNA Viruses Using Cas13
- STUDY: Intranasal Influenza Vaccine
 Spurs Strong Immune Response in
 Phase 1
- STUDY: Effect of Vaccination on Preventing Influenza-Associated Hospitalizations Among Children
- NEW STUDY: Study Finds Adjuvanted Flu Vaccine Helps Lower U.S. Nursing Home Outbreaks
- 2020 NFID Influenza News Conference

Additional Resources

- MDHHS Influenza Webpage
- MDHHS Bureau of Laboratories (BOL)
 Webpage and Test Request Forms
- CDC FluView Weekly Report
- CDC Healthcare Professionals Flu Toolkit
- Immunization Action Coalition: Ask the Experts- Flu
- MDHHS- Influenza Vaccine F.A.Q.

View Michigan Flu Focus Report archives here.

Influenza Burden Estimates

The Centers for Disease Control and Prevention (CDC) have released **preliminary burden estimates** for the 2019-2020 flu season.

Between October 1, 2019 through April 4, 2020, it is estimated that there have been:

- 39 million 56 million flu illnesses
- 18 million 26 million flu medical visits
- 410,000 740,000 flu hospitalizations
- 24,000 62,000 flu deaths

NOTE: The week of April 4 was the last week in-season influenza burden estimates will be provided for the 2019-2020 season.

2020-2021 preliminary burden estimates are expected to be released later in the flu season.

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